



The Raleigh Amateur Radio Society's **EXCITER**

GET INVOLVED

- RARS General Membership meeting: **Second Tuesday** of the month.
- The RARS net meets every night except Saturday @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays @ 8:00 PM on 146.64.
- RARS meets for a monthly dinner on the **third Tuesday** of each month.
- On the **fourth Tuesday** of every month, in-person meeting at Ridge Road Baptist Church where there will be project tables, demos, snacks, and socializing.



PUBLIC SERVICE EVENTS

Interested in helping? Visit
<https://www.rars.org/public-service.php>

frequently for our ham public service schedule.

RARS General Meeting

Date: January 13, 2026

Topic: RARS education Developments

Presenter: Brad Bazemore, KK4PWJ

Where: Ridge Road Baptist Church

Time: In-Person and Zoom Meeting at 7:30 PM, [More info at RARS.org](https://www.rars.org)

RARS In Person Gathering

Date: January 27, 2026

Where: Ridge Road Baptist Church

Time: 7:00 PM

In-person Gathering at Ridge Road Baptist Church where there will be project tables, demos, snacks, and socializing.

RARS Officers

PRESIDENT

Tony O'Connor
K1OC
president@rars.org

VICE PRESIDENT

Chuck Till
K4RGN
k4rgn@outlook.com

SECRETARY

Josh Kurland
KR4BTW
904-318-3651
joshkr4btw@gmail.com

TREASURER

Greg Seamster
KE4PAX
919.859.0029
KE4PAX@arrl.net



The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Regular dues for licensed amateurs are \$18 per year. (From July 1 through June 30.) Additional licensed immediate family members pay \$5 each per year. Dues for licensed full-time students and licensed seniors 60 and over are \$12 per year. Unlicensed individuals may become associate members for \$9 per year. Applications for membership are available from the treasurer or on the RARS web site.

<https://www.rars.org>

Exciter

The Exciter is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The Exciter welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the Saturday that is ten days before the general meeting. All submissions must be final. Drafts are not accepted.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Tom Lewis, N4TL, editor (editor@rars.org)

President's Message for January 2026

Happy New Year!

I hope everyone had a wonderful holiday season. It's hard to believe that it's January already.

RARS is an extraordinary club. Founded in 1969, we have become the largest amateur radio club in the ARRL Roanoke Division. We have a storied past, including putting up multiple first-in-class [Field Day scores](#) (including setting a Class record in 1989 that stood for 17 years) and putting on what has become [the largest all-indoor hamfest on the East Coast](#). I highly recommend perusing back issues of the *EXciter* in our on-line [archives](#) to get a sense of the club's history and to understand how much we stand on the shoulders of the members who came before us. If you do, you will recognize the names of many who are still members today.

Looking forward, the ARRL is calling 2026 the "Year of the Club" to honor the vital role amateur radio clubs play in "sustaining, growing, and energizing" amateur radio. I am pleased to say that RARS fulfills all of those objectives.

We sustain the hobby by sponsoring the annual [NC QSO Party](#), offering [topical presentations](#) at our monthly general membership meetings, and putting on the aforementioned [RARSfest](#) and [Field Day](#) efforts. We grow the hobby through our semi-annual [Technician licensing class](#), our [multiple VE sessions](#) each year, and our monthly [New Ham & Elmer Meeting](#). We energize the hobby by providing a fun forum for the exchange of ideas at [The Gathering](#), taking it to the field with the [Portable Operating Group](#), and giving people an opportunity to serve via our [public service committee](#).

And I haven't even mentioned resources such as our [equipment loan program](#), our [Discord server](#), our [repeaters](#) and [nets](#), or our amazing [website](#), which has everything you need to know about RARS on it. We are even in the process of assembling a Space Communications Outreach Portable Ground Station (SCOPGS, for short). More on that in the future.

I like to think RARS offers at least one thing of interest to every member. With over 500 members (plus or minus at any given point in time), that's probably not true. So, if we're not doing something that you would be interested in, please let any of the officers or board members know. You can send us a message via a web contact form by clicking on our names on the [Club Contacts](#) page or by buttonholing us at the monthly General Membership Meetings or Gatherings.

President's Message for January 2026, continued

The next six months are a busy time for RARS. We have the [NC QSO Party](#) Party on March 1, [RARSfest](#) on April 4, [Field Day](#) on June 27-28, and the all-important General Membership Meeting at which we approve the budget for the next fiscal year on June 9. Mark your calendars now!

Let me close by thanking Fin NC4FG for his energetic and creative hand on the RARS rudder for the past two years. If you want to see what he accomplished, just read (or re-read) the President's Message in the [December 2025 EXciter](#). He attributes the success in achieving those accomplishments collectively, but let's be honest, Fin drove the ship. I would also like to thank last year's board members, both those stepping down and those who re-upped for another year. It was a good team and we worked well together. And, of course, I would like to thank the new board members for allowing yourselves to be volunteered. I have every expectation that this year's board will be outstanding. Last but not least, I would like to thank the membership for electing me as president for the next term. I appreciate your confidence and will try not to break anything.

I wish you all a happy and prosperous 2026!

73,
Tony
K1OC



December 9, 2025 RARS meeting

President Fin Gold, NC4FG, called the meeting to order at 7:30 pm. He reminded Zoom participants of a few notes about using Zoom. See the minutes for all the details during the meeting on [page 24](#).



Fin Gold, NC4FG, starting
the meeting



2026 Board members

Marty Young, W4MY, Field Day Chair;
Ryan Reed, N7RYN, Director-at-Large;
Brad Bazemore, KK4PWJ, Education Chair;
Tony O'Connor Jr, K1OC, President;
Bob Starkenburg, W4TTX, Trustee Coordinator
Will Gwaltney Jr, WA4GK, Webmaster;
Tom Lewis, N4TL, Exciter editor;
Josh Kurland, KR4BTW Secretary ("Acting" until March 1).
Other members were not present. You can see the entire list on the [RARS website](#).

December 9, 2025 RARS meeting, continued



Door prize winners, left to right.
John Boling, NC4TI; Carl Slack, N4BBA; Ralph, Ralph Selmont NC4RS



Fin presenting a RARS 64 on 64 award to Tom, N4TL

You can read about the [RARS 64 on 64](#) at the RARS website

December 9, 2025 RARS meeting, continued



Chuck Till, K4RGN,
introducing the guest speaker



Fin (on the right) giving the gavel to the
new president Tony O'Connor, K1OC



Tom N4TL giving the presentation about operating awards.

All of [Tom's slides](#) are one the RARS website.

December 9, 2025 RARS meeting, continued



Tom told everyone about many operating awards. One above is a First Contact anyone can give that one. Download the image from the ARRL website and fill it out. The [64 on 64](#), is a RARS award for working 64 different stations on the RARS 146.64 repeater. You can log your 2 meter contacts in your logging software. After you have more than 64, export to a ADIF file. ADIF is amateur radio interchange file. Look for a program on the internet to convert to an Excel spreadsheet. In Excel you can sort on Frequency and delete all the lines that are not on 146.64. After that sort on the Calls and delete the duplicates. If there are more than 64 send it to the RARS net manager. You can also use the paper log that is shown in the RARS website.

Some of the other awards are WAC, worked all Continents; WAS, Worked all states. [DXCC](#), 100 entities. Tom said the 48 continual states has more than one entity. Alaska, Hawaii, Guam, and Puerto Rico are entities. They are separate from the continual 48 states because of the distance between them.

All of the slides for this presentation are on the [RARS website](#).

There also is the [ARRL Trident Award](#). It is for working 100 entities using voice, CW and digital.

One question was "are there still 10-10 nets". Yes, they are still on the air. See the [Ten Ten international website](#).

Marty Young reminded us that there is the [ARRL Field Day](#) and the [NC QSO party](#). Bob Starkenberg stated that State QSO parties are good for getting WAS. If you need state, search for their QSO party. The [N1MM contesting software](#) supports state QSO parties.

Search for HAM radio [contest calendar](#) to find many contests. Many contest have awards.

December 9, 2025 RARS meeting, continued

Full Name	Call Sign	Full Name	Call Sign
Barry Wheeler	K9IUT	Gilberto Diaz-Castro (DC)	WP4TGK
Bill Berzinskas	WW1H	Hans Enders	KQ4UXZ
Bob Starkenburg	W4TTX	Joe Spratt	KR4DIN
Brad Bazemore	KK4PWJ	John Boling	NC4TI
Bruce Sherman	KI4PAC	John Hollowell	K4JAH
Carl Slack	N4BBA	Josh Kurland	KR4BTW
Charles Swindell	WB4DCM	Julie McCrary	KT4JR
Chris Buttine	KC1GN	Ken Latchum	AD4GX
Chuck Littlewood	K4HF	Lou Ward	KN4IJC
Chuck Till	K4RGN	Marty Young	W4MY
Dan Stancil	WY3O	Michael Johnson	KZ4LY
Daniel Berzinskas	KQ4GOB	Mike Joondeph	N1JDW
Dean Belk	NOCALL	Neal Atlow	KR4HBQ
Dennis Mason	WZ0Q	Ralph Selmont	NC4RS
Denny Oestreich	KO4IBL	Ryan Reed	N7RYN
Devin Hedge	KN4FVH	Tom Lewis	N4TL
Fin Gold	NC4FG	Tony O'Connor	K1OC
Frank Scaraglino	KA2FWC	Will Gwaltney	WA4GK

36 People attended in person plus 22 on zoom.

58 total

December 2025 RARS Net Report

30 2m nets: 314 checkins, 665 minutes duration

5 6m nets: 53 checkins, 94 minutes duration

Julie Royster, KT4JR,
RARS net manager

RARS MONTHLY SUPPER, IHOP Restaurant DECEMBER 16, 2025



Front to back

Dennis Mason, WZ0Q

Robert McCoy;

Ken Latchum, AD4GX;

Robert Chew;

Bob Chew, K4YXM;

Chris Buttine, KC1GN;

Ralph Selmont, NC4RS;



Back to front

Tony O'Conner, K1OC;

Andrea Buttine;

Bob Starkenburg, W4TTX;

Chuck Littlewood, K4HF;

Dale Jones, WA4JCK;

Susan Jones, WA4AKB;

Tom Lewis, N4TL

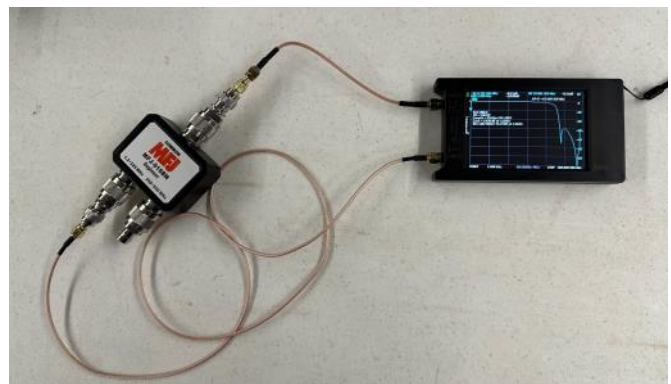
RARS meets for a monthly dinner on the third Tuesday of each month. We meet at the iHop restaurant, 6:30PM. Its on the corner of 6 forks road and Sawmill RD.

[7471 Six Forks Rd.](#)

Monthly In-Person RARS Gathering, December 23, 2025

Ridge Road Baptist Church, at [2011 Ridge Road, Raleigh](#)

The meeting starts at 7:00 pm in the Fellowship Hall, but we start setting up at 6:00 pm, and you are welcome to bring your own ham radio equipment and projects to demonstrate, show off, or just work on with other like-minded hams -- we have plenty of tables. You might also find sources of coax, connectors, zip cord, Powerpoles®, and whatnot.



Miscellaneous pictures taken at the gathering, copied from RARS Discord

Monthly In-Person RARS Gathering, continued



Miscellaneous pictures taken at the gathering, copied from RARS Discord

Monthly In-Person RARS Gathering, December 23, 2025

Full Name	Call Sign	Full Name	Call Sign
Andrw Brown	KR4HRA	John Boling	NC4TI
Anthony O'Connor, III	KR4DLO	John Bowser	No Call
Arash Manafirad	KR4GOJ	Josh Kurland	KR4BTW
Austin Hyder	K4HYD	Julie McCrary	KT4JR
Barry Wheeler	K9IUT	Ken Latchum	AD4GX
Billy Janke	KE4VNC	Matthew Brown	No Call (Yet!)
Bob McCoy	KR4HOO	Mike Joondeph	N1JDW
Brantley West	K4CBW	Nancy Torborg	KB2TNR
Craig McCrary	KY4WM	Nick Baker	W4NAB
Dennis Mason	WZ0Q	Richard Hall	KR4LH
Ed Phelps	KR4DCH	Rob Bowser	KO4HUI
Gilberto Diaz-Castro	WP4TGK	Stephen Haffly	NY4NC
Greg Seamster	KE4PAX	Tadd Torborg	KA2DEW
Jesse Simpson	KR4HYU	Tim Thurber	WX4TIM
Joe Haggerty	N4BJH	Tony O'Connor	K1OC
Joe Spratt	KR4DIN		

31 People attended the December 23th Gathering

Deepest Sympathies

A transfer of \$50 has been made to the RARS / Dick Bitner Youth Education fund in memory of Tim Rodgers KC1TWR (11/1/1952 – 10/21/2025). He was a member of RARS. Timothy Webster Rodgers, 72, of Carrboro, North Carolina, died suddenly at home on October 21, 2025, after living with heart disease for many years.

<https://www.legacy.com/us/obituaries/newsobserver/name/timothy-rodgers-obituary?id=59987346>



HAMFEST HOTLINE JANUARY 2026

By the time you read this, we will be 3 months away from The Raleigh Hamfest, RARS*fest*!

Over the past few years, RARS*fest* has become recognized as a premier hamfest destination for attendees and commercial dealers alike! Here are some quick facts about our 2026 event:

RARSfest 2026

- **When:** Saturday, April 4, 2026
- **Where:** Jim Graham Building, the NC State Fairgrounds
- **Hours:** 8 am – 3 pm
- **Admission:** Individual \$10 in advance; \$12 at the door

Flea Market Tables \$27 in advance; \$30 at the door

Tickets will be available for purchase online starting January 30, 2026. Credit/debit cards, Apple/Google Pay accepted. Note: No ticket(s) will be mailed to you.

Tickets will be available for purchase (cash/credit/debit) at the following RARS meetings:

- February 10 (General Meeting)
- February 24 (The Gathering)
- March 10 (General Meeting)
- March 24 (The Gathering)

ALL tickets purchased before March 27 will be eligible for a special “Early Bird” prize drawing.

ALL registered volunteers receive a commemorative T-shirt, free admission (not good for prize drawings), but they will be entered in a special “Volunteers Only” prize drawing.

As usual, RARS*fest* will be offering:

- License Testing
- Forums
- Commercial dealers HRO, Ham Badgers, and Quicksilver Radio (under new ownership!) confirmed; [Rocket Machine Worx](#), new this year
- Static vehicle displays
- Satellite demonstrations
- Consignment sales (**for RARS*fest* volunteers only**)
- FREE parking
- Onsite concessions

Follow RARS*fest* on [Facebook](#)

Join the [email](#) list for updates!

[Share this event](#) with any/EVERY ham you know!



RARS Member Birthdays

Grady	AJ4YA	01/01
Bob	N4GEB	01/01
Bill	KG6NDT	01/01
Donald	KS9F	01/01
Barry	KK4NUN	01/03
Jerry	KE4TTS	01/04
Chuck	K4HF	01/04
John	WB4DDK	01/04
Joe	KM4WRQ	01/06
Ted	WA8NVC	01/06
John	N4YRD	01/08
John	N1GMV	01/08
Beth	KF4QMR	01/09
Ed	N4ESA	01/09
Richard	N1FUA	01/09
Jim	N4CAE	01/09
Dan	WY3O	01/11
Curt	WB8YYY	01/11
Chris	K4CKB	01/11
Joe	N4BJH	01/12
Nathan	KO4W	01/14
Evan	ZL2TFA	01/14
Bill	KI4BKF	01/15
Billy	KE4VNC	01/16
Marko	KM4ZBT	01/16
John	NG2I	01/17
Marc	W4MPS	01/19
Rita	KO4GHW	01/19
Joe	K4HEW	01/19
Barry	K9IUT	01/19
Ashby	KB5ZIH	01/20
Dave	N4DSF	01/21

RARS Member Birthdays

Ken	K4JFH	01/21
Austin	K4HYD	01/21
Andy	KM4NRY	01/22
Ken	AC4RD	01/23
Richard	KR4RL	01/23
Tyler	KO4BZA	01/23
Michael	KN4CBZ	01/24
Dale	WA4JCK	01/26
Brian	AA4BK	01/27
Jim	KO4ZHO	01/28
John	KM4JB	01/29
Cyndi	KD4ACW	01/30
Alan	AB4OZ	01/30
Tom	K2UCU	01/31
Dan	N3ND	01/31
Doug	KR4HES	01/31

RARS New Members

Michael Blum	KD2VIB
Andrew Brown	KR4HRA
John Boulware	KM4JB
Dereck Martin	KK4VIO
Tom Wilfong	KR4IOS
Pete Lugo	WB4R
David Leu	KQ4VHU
Ben Packard	K4ME
Kevin Wood	KR4IQM

Numbered standard radiograms

The ARRL and RRI (Radio Relay International) have revised the list of numbered standard radiograms used in the National Traffic System. The list is backward-compatible; new texts have been added.

The list can be found at <https://nts2.arrl.org/wp-content/uploads/2025/10/ARL-Numbered-Radiogram-Texts-F-A-v-3.0-2025-10-7.pdf>.

If you engage in, or think you might someday engage in, NTS traffic handling, please download the new list.

Earlier this year, the ARRL and RRI signed a memorandum of understanding to advance the NTS 2.0 concept. See <https://nts2.arrl.org/2025/07/20/radio-relay-international-and-arrl-the-national-association-for-amateur-radio-sign-memorandum-of-understanding/>.

If you are unfamiliar with the NTS, basic information can be found at <https://www.arrl.org/nts>.

73, Chuck, K4RGN



RARS Classifieds

Copied from <https://www.rars.org/classifieds.php>

The items below were listed within the last 30 days on the RARS website.
Check the RARS Classified List on the RARS website regularly for new items.

Agilent E4402B Spectrum Analyzer/Communications Tester

Posted January 5th, 2026 by: [NC4FG](#)

Contact: nc4fgfin@gmail.com

The club was donated lab quality Spectrum Analyzers. We've sold many of these so far. We still have a few good ones available.

The donated value was \$1,000.

\$700 is a good deal.

\$500 is a steal.

Get yours for \$500.

All proceeds go to RARS. [Link to testing video](#)

Contact me by email or Discord DM to coordinate a local demo and purchase.

Anyone HT and NanoVNAs

Posted January 5th, 2026 by: NC4FG

Contact: [NC4FG](#)

nc4fgfin@gmail.com

Anyone AT-D878UV II Plus Transceiver

144/430MHz Digital and Analog

Bluetooth and GPS

Does APRS and DMR and includes many accessories.

Full details in this [Google Doc](#)

Paid over \$300 and barely used.

Price: \$220

NanoVNA-F V2 Vector Network Analyzer

4.3" screen, metal case, test loads, adapters

Configured for Ham band testing

Price: \$60

RARS Classifieds continued

Small-screen NanoVNA
Test loads, charging cable
Price: \$20

Serious inquiries by email or Discord DM.

Estate Items

Posted January 5th, 2026 by: [NC4FG](#)
Contact: nc4fgfin@gmail.com

Many items from several estates. 100% of proceeds go to RARS.

Radios:

- Very nice Yaesu FTDX-3000. Includes Jesverty SPS-3011 Power Supply, Yaesu SP-20 Speaker, and Yaesu MH-31 Microphone: \$800
- Kenwood TH-F6 HT, charger, mic, spare battery: \$150
- Icom IC-R30 Handheld Receiver: \$400
- SDRPlay RSP-1 SDR Receiver: \$40
- Hammarlund SP-600 JX-17 (Rare) broadband receiver: \$250
- Johnson Viking II and VFO: \$100

Much more! Take a look at this [Google Sheet](#)

Serious inquiries by email or Discord DM.

For Sale Ameritron AL-80A Amplifier

Posted January 1st, 2026 by: W4BMX
Contact: [W4BMX](#)

For Sale - Ameritron AL-80A Amplifier with an extra Tube

(2) 3-500 Z Tubes

Working \$650. Pictures upon request.

You are welcome to test.

Regards,
W4BMX
919 961-1813

RARS Classifieds continued

FS: HQ-129X, Heathkit Apache

Posted December 16th, 2025 by: [W4BOH](#)

Contact: infomet@embarqmail.com

Some classics, for sure.

HQ-129-X, a fine postwar workhorse, better quality and performance than the inexpensive Hallicrafters receivers. \$100

Heathkit Apache, successor to the famous DX-100.

Beautiful two tone green AND striking chrome knobs.

The most pounds you can get for the money!

\$100

Neither are tested, but they don't show external damage.

Pick up in Hillsborough

FS: Yaesu FTDX5000 and SM5000 Station Monitor

Posted December 16th, 2025 by: [W4BOH](#)

Contact: infomet@embarqmail.com

Yaesu FTdx-5000 with SM5000 station monitor. 160 – 6 meters, 200 watts SSB, CW, FM and 50 watts AM. This equipment is in excellent condition and always in a non-smoking environment. Comes in original boxes with all manuals. Pictures available on request.

Located Hillsborough.

Asking \$2500.00

Collector Special - TENTEC SCOUT 555

Posted December 14th, 2025 by: [N1GMV](#)

Contact: n1gmv@hotmail.com

I have a very nice TenTec Scout 555 here in exceptional condition. I am including several band modules with it. In case your not familiar, the TenTec Scout 555 is a small "CB Sized" 50 watt SSB/CW transceiver that uses removable band modules.

If you are a TenTec fan this would be a great addition to your collection.

Asking \$400

Minutes, Board of Directors Meeting

Raleigh Amateur Radio Society

December 2, 2025

7:00 PM on Zoom

1. President Fin Gold NC4FG called the meeting to order at 7 pm. He recognized three visitors, Josh Kurland KR4BTW, Will Gwaltney WA4GK, and Lawrence Riley KR4BGL. Board members present were: Fin Gold NC4FG, Chuck Till K4RGN, Julie Royster KT4JR, Brantley West K4CBW, Nancy Torborg KB2TNR, Chuck Littlewood K4HF, Richard Hall KR4LH, Tadd Torborg KA2DEW, Tony O'Connor K1OC, Greg Seamster KE4PAX, John Honeycutt N8ZU, Ken Latchum AD4GX, Tom Lewis N4TL, and Denny Oestreich KO4IBL.
2. Quorum Call: President Gold asked secretary Julie Royster whether a quorum had been achieved, and she confirmed there was a quorum.
3. President Gold asked for a motion to approve the minutes from the November 2025 Board Meeting. The motion was made, seconded, and approved.
4. President Gold thanked the retiring board members for their service and stated that they should be proud of their accomplishments. The board will use December as a transition month to familiarize the incoming officers and committee chairs who will be installed next week at the club meeting with their roles.
5. Old Business
 - a) NC QSO Party Club Station - Fin Gold NC4FG There is no volunteer yet to host operation of the club station, but Brad is willing, and he lives outside Carrboro about 40 min away. We could operate from 10 am – 8 pm. We are not a bonus station this year. We are not required to operate the whole time. The police club would charge \$275 for the day to operate there. It is necessary to put up antennas there if we want to go there. There was discussion about how the distance from Raleigh to Carrboro might reduce participation if Brad hosts the station.
6. New Business: none

RARS Board of Directors Meeting minutes continued

7. Officer's Reports

- a) Vice-President's Report – Chuck Till K4RGN The January speaker has had to delay, so we need a new program for January.
- b) Treasurer's Report – Greg Seamster KE4PAX The ARDC grant money has been received. The current number of voting members is 499.
- c) Secretary's Report – Julie Royster KT4JR The minutes are up to date.

8. Committee Reports:

- a) Net Manager Julie Royster, KT4JR Nets are doing fine.
- b) Education Director Denny Oestreich, KO4IBL
11 people completed the last class, and 6 of them are now shown as licensed on QRZ.
- c) FM Repeater Chair John Hollowell, K4JAH
President Gold reported for John that another test visit at Eastern site was again inconclusive about transmission from that location. We plan to build a device to test reception.
- d) Club License Trustees Tom Lewis, N4TL, no changes
- e) Exciter Editor Tom Lewis, N4TL, The next issue is almost done but needs a list of new members from Greg.
- f) RARSfest Chair Nancy Torborg, KB2TNR
HRO is coming as a vendor. Rocket Machine Works is coming (producer of cables, adapters, plates for coax pass-through with threads). Tickets to go on sale in late January.
- g) ARRL Liaison Chuck Littlewood, K4HF
Nothing new. Chuck urged all to send letters to Congress about the ARRL HOA initiative.
- h) RARS VE Coordinator Richard Hall, KR4LH
FCC is operating again. There are 3 applicants already for the next test session on Dec 23.
- i) RARS Webmaster Tony O'Connor, K1OC The website is running smoothly. The new webmaster will receive transition material from Tony in the next day or two.
- j) Youth Chairman Brantley West, K4CBW Procurement of satellite equipment has started. Brantley will receive and test the new equipment this month.

RARS Board of Directors Meeting minutes continued

k) At Large Director Tadd Torborg, KA2DEW

At the December Gathering we will make quarter wave ground planes, and in January we will do an FT8 demonstration.

l) At Large Director Ken Latchum, AD4GX no comments

9. Other comments from Board Members The Torborgs volunteered to host the NC QSO party station but would need a little help with antennas. There is room for 3 stations if one would be in the ham shack because it is small. Parking control would be needed.

10. Adjournment: President Gold asked for a motion to adjourn. Chuck Till so moved. The motion being seconded and approved, the meeting was adjourned at 7:38 pm.

Respectfully submitted,

Julie Royster, KT4JR, RARS Secretary



RARS General Membership Meeting minutes

December 09, 2025, 7:30 PM

1. Call to Order and Opening Comments – Fin Gold, NC4FG

President Gold called the meeting to order at 7:30 pm. He reminded participants of a few tips about using Zoom. He reminded us of several upcoming events: the monthly RARS Dinner, and the monthly RARS Gathering and License testing.

2. President Gold recognized one new member, one visitor, and one newly upgraded licensee (amateur extra) and welcomed them.

3. Vice President's Report or announcements – Chuck Till, K4RGN

Chuck announced that our January program speaker has had to postpone their talk. He asked for anyone who would like to suggest a program or to present a program to contact him asap.

4. Secretary's Report or announcements – Josh Kurland, KR4BTW (stand in)

The minutes are up to date.

5. Treasurer's Report or announcements – Greg Seamster, KE4PAX. Greg announced the recent passing of RARS member Tim Rodgers KC1TWR.

6. Specific Announcements or Reports from Directors

The next Board Meeting will be at 7 PM Tuesday, January 6, 2026 on Zoom. Contact Tony K1OC for details on attending.

7. Quorum Call: in-person + Zoom: President Gold asked stand-in secretary Josh Kurland whether a quorum was achieved, and he confirmed that there was a quorum.

8. Approval of Club Meeting Minutes: President Gold asked for a motion to approve the minutes for the RARS meetings for November 2025. The motion was made, seconded, and approved.

9. President's Message - Fin Gold, NC4FG

President Gold recognized the contributions of the existing board members, especially John Honeycutt N8ZU for serving on the board for six years.

RARS General Membership Meeting minutes continued

10. RARS 2026 Board Installation - Fin Gold, NC4FG

President Gold invited the incoming 2026 board members to the front to be inducted into the board. Those present were:

- a. Marty Young, W4MY
- b. Ryan Reed, N7RYN
- c. Brad Bazemore, KK4PWJ
- d. Tony O'Connor Jr, K1OC
- e. Bob Starkenburg, W4TTX
- f. Will Gwaltney Jr, WA4GK
- g. Tom Lewis, N4TL
- h. Josh Kurland, KR4BTW

11. Door Prize Drawing - Chuck Till, K4RGN

Chuck supervised the drawing of tickets for three door prizes. The prizes were a GFCI outlet tester, a \$25 gift card to Lowes and "Your first amateur radio HF station" guidebook. The winners were: John Boling, NC4TI; Carl Slack, N4BBA; Ralph Selmont NC4RS.

12. Award Announcements - Fin Gold, NC4FG

President Gold presented Tom Lewis, N4TL with the "64 on 64" award for making 64 unique contacts on the 146.640 repeater.

13. VP Chuck Till, K4RGN, to Introduce Program:

Operating awards - There are many

Presented by Tom Lewis, N4TL

14. Following the program President Gold invited President Elect O'Connor to assist in adjourning the meeting. President Gold asked for a motion to adjourn. The motion was made, seconded, and passed unanimously. The meeting was adjourned at 8:33 pm.

Respectfully submitted,

Josh Kurland KR4BTW, RARS Acting Secretary

Salvaging pipe for a future antenna project

During one of his last weekends as club president, Fin gave Otis and his dad Mike (K3LOE) a lesson on safely taking down a flimsy mast with loose guys and a tall HF monopole from a house scheduled for demolition. The antenna was a loss, but the three were able to save four 10-13' lengths of light duty pipe and some brackets ("Always save the brackets," Fin said). Mike and Otis had also previously salvaged an [AntennaCraft ST2](#) scanner antenna from the roof. Otis and Mike learned a lot about being a ground crew and Otis got to hang out with "one of his favorite hams."

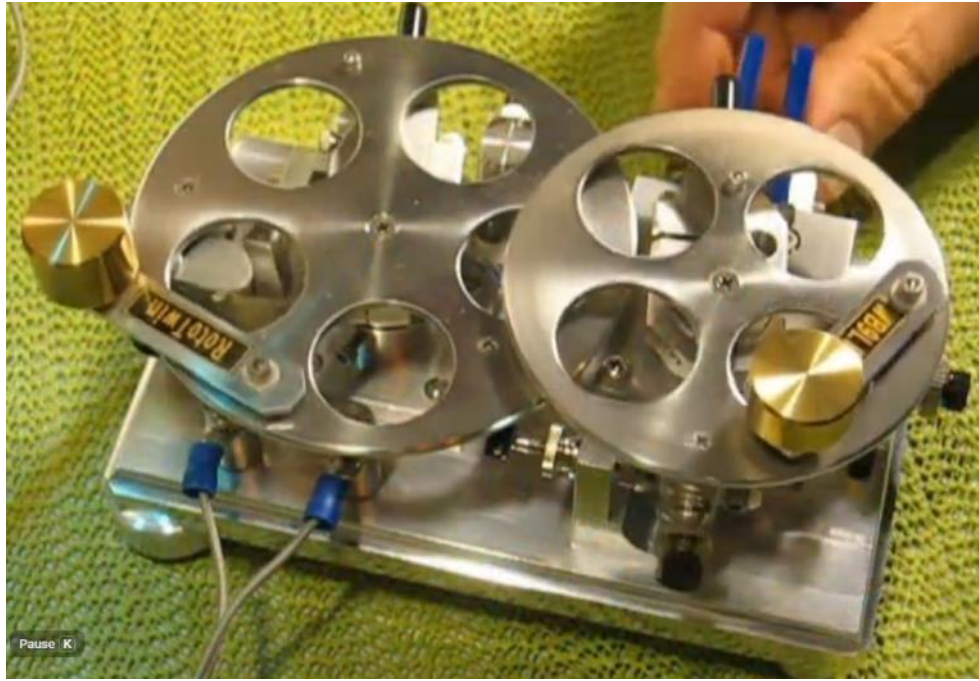


Otis Nutt WSGB603 (left) and Fin Gold NC4FG with fence top rail mast material they salvaged from a tear down, December 7, 2025.

Fully Mechanical Keyers

There is an [AWA Communication Technologies Museum](#) in Bloomfield NY. One of their displays has a number of all mechanical keyers. No electronics!

This video shows one of them in operation, <https://www.youtube.com/watch?v=1J0CURISeWw>



The Parkwood RotoTwin an Automatic Telegraph key by WB9LPU



Keys and Automatic keyers

Digital TV broadcasters in Wake County

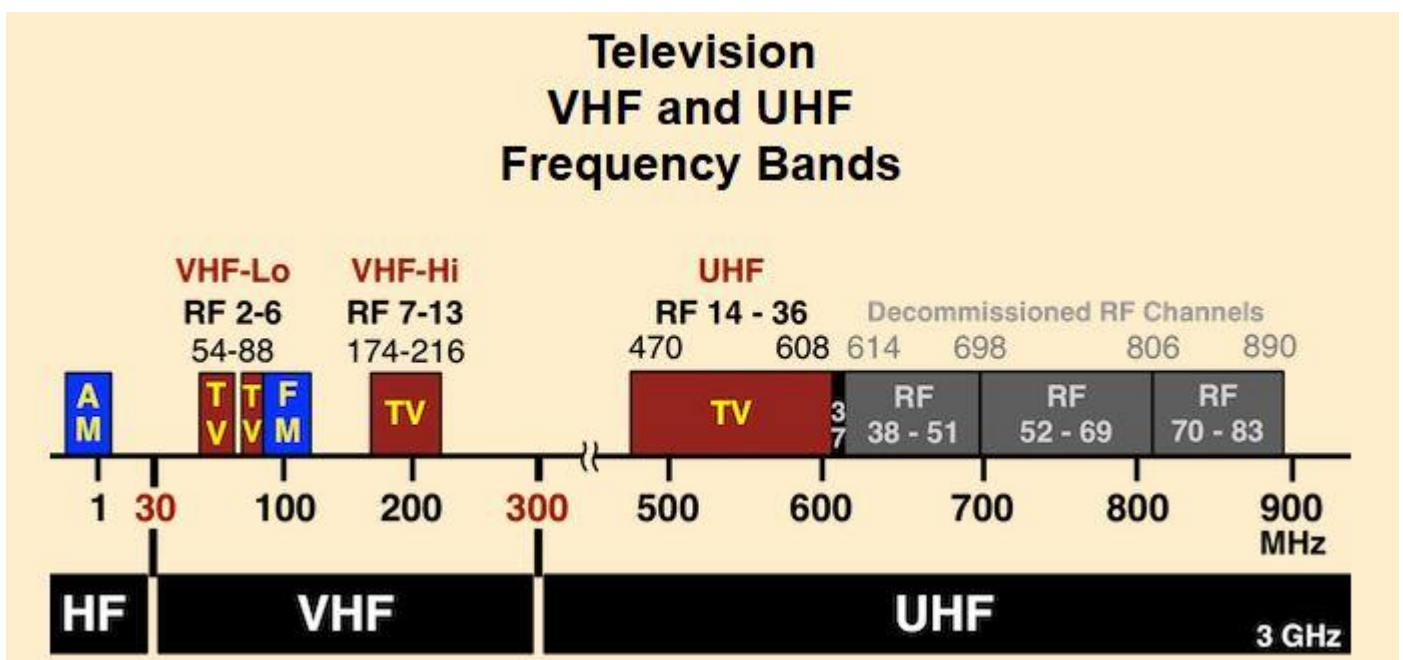
By Chuck Till, K4RGN

Part I

In May 2024, RARS had a program on [ATSC 3.0](#), the new standard for NextGen broadcast TV. Here's a current rundown on digital TV broadcasters in Wake County.

A few things to understand up front. Both ATSC 1.0 channels and 3.0 channels are on the air here. Both are digital signals. If you look at them with an RF spectrum analyzer or an SDR, you will see that ATSC 1.0 and 3.0 use very different modulations. ATSC 3.0 provides a much higher bit rate. The data rate for ATSC 1.0 is 19 megabits/second and for 3.0 is 56 megabits/second. An ATSC 1.0 receiver, which nearly all of us have, cannot receive ATSC 3.0 at all.

One thing that ATSC 1.0 and 3.0 have in common: they use the same channelization plan as analog TV. Channels are still 6 MHz wide, and the frequencies assigned to those channel numbers have not changed. Note that during the conversion to digital, RF channels 37 and higher were taken away from TV broadcasters. You can find the actual frequency assignments for RF TV channels at <https://otadtv.com/frequency/index.html>.



Digital TV broadcasters in Wake County, continued

When digital TV was introduced, a distinction was created between physical channel numbers which correspond to frequencies in MHz and display channel numbers which are what consumers see on their TV screens. For example, WRAL-TV had been channel 5 (low VHF) during analog days. Upon the conversion to digital, WRAL-TV moved to physical channel 17 (UHF) but retained its display channel number of 5. Retention of display channel numbers made it easier for consumers to follow the channels they were accustomed to. Once in a while, a display channel will move to a different physical channel. This is why you have to "rescan" your TV receiver occasionally. The rescan will put a fresh mapping of display channels against physical channels into your receiver. The theory was that consumers would not have to concern themselves with physical channel numbers. That turned out to be not exactly true.

During the migration from analog to ATSC 1.0, most stations on VHF moved to UHF. Most stations on UHF stayed on UHF. A quirk of the Raleigh area is that display channel 11 (WTVD) and display channel 17 (WNCN) were assigned to high VHF for digital. For this reason, if you expect to receive over-the-air TV in Raleigh, you need an antenna that explicitly supports high VHF as well as UHF. Beware: many antennas on the market are UHF-only and won't work well for WTVD and WNCN unless you happen to live close to Garner or your antenna is on a high outdoor mast. No broadcaster in this area is using low VHF anymore.

In both ATSC 1.0 and 3.0, a display channel can have subchannels. For example, WRAL-TV's primary feed is denoted 5.1. WRAL-TV has additional subchannels (5.2, 5.3, and 5.4) that carry other programming. All subchannels are multiplexed on the same physical channel. The gotcha is that ATSC 1.0 doesn't provide a bit rate high enough to carry all the subchannels at high 1080-line (HDTV) resolution. The majority of stations use high resolution for their primary feed. Their secondary subchannels are at intermediate resolution (720 lines) or low resolution (480 lines, comparable to analog). The faster bit rate in ATSC 3.0 will allow secondary channels to be sent at higher resolution, depending on how many secondary channels a broadcaster chooses to use. However, you may find that many programming sources for the secondary channels are from the 1950s through 1990s and the recording is limited to 480 lines anyway.

Digital TV broadcasters in Wake County, continued

Lastly, there is a new complication. During the migration from ATSC 1.0 to 3.0, some display channels are being broadcasted on a different physical channel by a different station. As an example, display channel 28.1 (the primary feed for WRDC) is being broadcasted on a multiplexed physical channel 18 operated by WLFL. This is hidden to you because of the mapping of display channels to physical channels, but there is a consequence... the 28.1 feed has to be run at 720 lines instead of 1080.

Next month, I will have Part 2 of this series that describes the use of ATSC 1.0 in the Raleigh area.

County hunting by Dave, W4YDY

MARAC County Hunters Database

Re: Some links changed since I sent you the info about County Hunting

Hi Tom,

MARAC.ORG had to change web site server a couple of months ago so most links had to be changed and because it would not meet the needs required for the logging program, it required some major re-writes of the web site and the logging program. All awards have been on hold since August and they hope to be back to normal by **the end of the year** along with the logging program automatically updating almost every week with the latest awards.

The database link is now <http://marac.org/database/database.php>

replacing

https://new.marac.org/database/database_AwardLookup.php

Award rules is now at

<http://marac.org/documents/award-rules.pdf>

replacing

<http://marac.org/awards/Award-rules.pdf>

The County Hunter Web by Don, K3IMC, the lead MARAC.ORG and logging program writer assisted by Bob, KA9JAC is

<http://www.countyhunterweb.org/index.php>

73, Dave Langley,

Desecheo 2026 Dxpedition



Click on the picture to go to their website.

Press Release #3

Date/Time: December 30, 2025 02:10 UTC

Desecheo DXpedition 2026, The Desecheo 2026 team is happy to report that we are making progress. We should be QRV in two weeks.

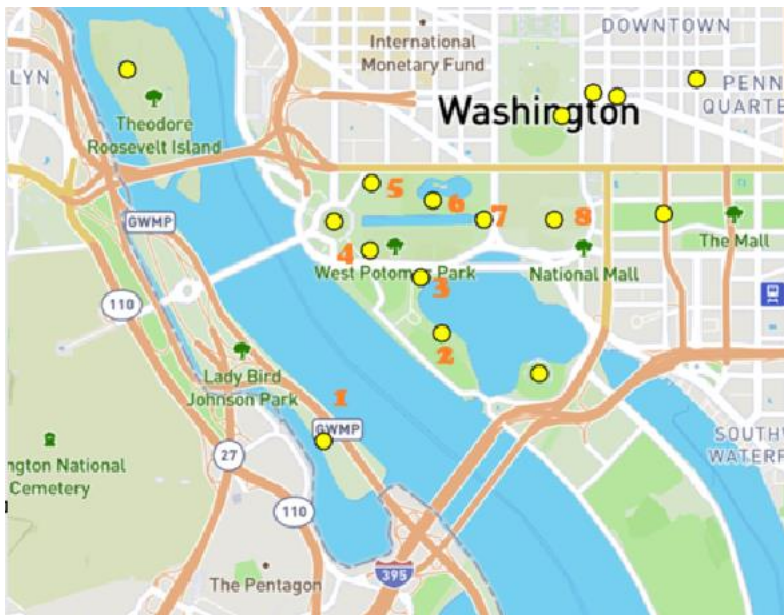
The team will reconvene on January 9 at the KP4AA Contest Station to finalize preparations for the deployment window of January 12–14, 2026, weather permitting. Once deployed, the DXpedition is expected to remain QRV for approximately 30 days, until the scheduled recovery date.

Parks On The Air (POTA) in Washington, D.C.

How to Earn the Cheetah Rover Award

By: Carl Davis, W8WZ

Some friends of mine recently move to Washington, D.C. and invited me to visit them just before Christmas. Knowing that a visit to the nation's capital is a wonderful opportunity to enjoy POTA due to the high density of national parks and monuments, I added a day to my visit dedicated totally to doing POTA. On 22 December 2025, the shortest day of the year, I spent 5 hours completing 15 activations using an Elecraft KX2 transceiver and two different telescopic whip antennas. Below is the plan I used. It is hoped that this article will help others interested in planning their own POTA rove to DC.



The big jackpot of doing POTA in D.C. is doing one activation that is a 7-fer. That means when the operator does an activation in that spot, he or she is actually activating 7 different POTA parks at the same time. This is possible because in this exact location several trails combine in proximity to other monuments in a park. So, if you set up in the exact right spot, your activation will be from 7 POTA parks at once. This spot can be a bit hard to find. I was fortunate that my friend John, K4EB had activated this location a few months before my visit, so he was able to give me exact guidance to set up in the correct location. This spot can be found by viewing the webpage for each of the 7 parks to find their legal boundaries then using google earth to overlay the information from each of those webpages and find the spot where the overlap hap-

Parks On The Air (POTA) in Washington, D.C.

pens. Here are the best instructions I can offer. First, get to The Lyndon Baines Johnson Memorial Grove on the Potomac National Memorial. This is POTA Park number US-0784 and is labeled as park 1 on the graphic above. This can be easier said than done as this park does not have an address. If you type “Lyndon Baines Johnson Memorial Grove on the Potomac National Memorial” into the Uber app, it will insert the address of the park’s administrative office in Virginia, not the address of the park itself. I learned this the hard way. To get around that, enter the name of a marina that is located in the park when ordering an Uber. Set your destination as “Colombia Island Marina George Washington Mem Pkwy, Arlington, VA 22202”. Please note that even though that address says Arlington, VA the actual location of the Marina is on Colombia, Island in DC. Uber will drop you off in the parking lot. Apple Maps will also take you to this parking lot if you are driving yourself and ask it to take you to the marina. If you are driving your own car and want to activate from the parking lot, you can do so but you will “only” be activating 4 parks at once instead of 7. Also, if you get out of the car and operate from one of the picnic tables near the parking lot you will be doing a 4-fer. This is certainly not bad! It is very pleasant to operate from one of those picnic tables and doesn’t require much walking at all. If you have mobility issues or just want to be as comfortable as possible, or your pota gear is not super portable and you don’t want to schlep it very far, then this is the best option. Operate from one of the picnic tables here, or from your car and do a 4-fer. However, if you want to activate 7 parks at once, then from the parking lot walk away from the marina towards the stone monument to LBJ. When you get to that stone monument walk towards the Washington Monument, which you will see across the river, walk across the parkway and setup under a tree that stands between the parkway and the Potomac. In that spot you will be in 7 parks at once. You will need to bring your own chair. I use a great little chair made by a company called Helinox that is very light weight. The 7 parks that are activated from this location are: US-4581, US-9901, US-4567, US-0670, US-0784, US-9898, US-4564. Here I used my 16-foot telescopic whip vertical antenna with ground radials and held the radio on my knee using a kneeboard while sitting in the chair. In very short order, I had made 14 contacts on 20-meter CW and was ready to move to the next park.

I walked back to the parking lot and called an uber to take me to the FDR Memorial which is located on the tidal basin and is park US-0776. It is labeled as park 2 on the graphic above. Here, after viewing the monument, which is very nice, I walked down to the tidal basin part of the monument and set up my station on a park bench. I put the antenna directly behind the bench where I sat and did not lay down ground radials. I sat on the bench with the radio on my knee us-

Parks On The Air (POTA) in Washington, D.C.

ing a knee board. I quickly made 18 contacts on 20 CW. This park (and every other park that I activated afterwards) is located on the national mall meaning that it counted as a 2-fer as I was activating both it and US-0655. From this operating position, looking to my left, I could see the Martin Luther King, Jr. Memorial (US-0785). So, I walked over to it and set up on a bench there in the same way. This is labeled park 3 on the graphic. I quickly had another 11 QSOs in the log and had already got 10 new parks activated. This park had more foot traffic than the FDR



memorial had, but I was able to find an unused bench.

Next, I walked across Independence Ave. SW and into the area around the reflecting pool. Here there are several more parks, labeled parks 4,5,6,7,8 on the graphic. They are very easy to get to. They are, Constitution Garden (US-0653), Korean War Memorial (US-0780), Vietnam War Memorial (US-0793), WW2 Memorial (US-0796) and the Washington Monument (US-0794). Also in this area is the Lincoln Memorial. However, the Lincoln memorial was very crowded and had no bench near it that I could sit on, so I did not activate it. The monuments I activated all had park benches that I could sit on. Due to crowds in this

Parks On The Air (POTA) in Washington, D.C.

area, I did not use my 16-foot vertical antenna. Instead, I used the Elecraft AX1 whip antenna connected directly to the BNC jack on the side of my radio with the radio on my knee board for those activations.

I used headphones so I did not disturb anyone with sound as I sent and received CW. This was as low impact/low profile operation as I could manage, and it worked very well. I did not seem to bother anyone or raise any attention from anyone else in the park, including the police and National Guard troops who frequently passed by, and I was able to make plenty of contacts at each park. My final activation of the day was at 4:30 PM at the Washington Monument. The sun was starting to go down and it was getting cold when I had activation at park 15 finished. I took an uber back to the hotel and entered my logs into the POTA webpage that evening. Activating 15 parks in one day earns the Cheetah Rover award, which was my goal. Thanks to the 7-fer and 2-fer I only had to do 8 individual activations to activate 15 parks. The temperatures that day were in the low 30's. The tidal basin froze as I was activating the FDR monument and I could hear the sounds of the ice forming in the water, but it did not rain, and the wind was not bad. Even though less pleasant than being out on a nice day, being out when the weather was not perfect may have meant fewer other park users which made it easy to find empty park benches.

To activate all of the parks the way I did requires low impact radio equipment. There are no places for wires in trees along the Reflecting Pool and because there are many other people around, even vertical antenna systems need to be compact and close to the operator. The Elecraft KX2 and AX1 combo along with a knee board and plug in KXPD2 paddle really made this easy. At one of the parks there was a picnic table, and I was able to operate from that which felt like a luxury after having been using the knee board until then. There was a food truck near there so I got a pretzel so that as I sat at the table using the radio I would look more natural to the passer by if seen eating a pretzel (or that is my excuse at least). I also took advantage of that tabletop operation to plug in an external battery to preserve the built-in battery as much as possible. At that activation, I ran 10W. When using the internal battery, I limited output to 5W to conserve battery.

When I got back to the hotel, I had an e-mail from Chaise KQ4WJP saying that his contact with me when I was activating the Korean War memorial was his first CW contact! I put a paper QSL card in the mail to him as soon as I got home. Also, while activating that memorial I made a Park to Park contact with AC5XK who was activating the Washington Monument just across the reflecting pool from me! Some DX! I also worked N4FFF who worked me with a proto-

Parks On The Air (POTA) in Washington, D.C.

type QRP rig he is building. He was powering it with a 9 Volt battery. So, not only was I in interesting locations, but I also made interesting contacts too.

Here are links to the gear I used:

Chair:

<https://tinyurl.com/whr6d936>

Kneeboard:

<https://tufteln.com/products/knee-board-field-desk>

Radio:

<https://elecraft.com/products/kx2-ssb-cw-data-80-10-m-transceiver>

Key:

<https://elecraft.com/collections/keyer-paddle/products/kxpd2-attached-precision-keyer-paddle>

Antennas:

Elecraft : <https://elecraft.com/collections/ax-line-antennas-1/products/ax1-antenna>

16-foot whip Ground Mount: <https://www.ebay.com/itm/146597144123>

16-foot whip: <https://www.ebay.com/itm/226768708847>

Battery:

<https://www.bioennopower.com/products/12v-4-5ah-lfp-battery-pvc-pack>

While in Washington, DC I also took time to visit the Spy Museum <https://www.spymuseum.org/> This is an especially fun museum for radio nerds because it has several World War Two era spy radios on display including a paraset. It also has a display about the enigma and the work done at Bletchley Park during the war. Adding that to a POTA rove makes for a great radio vacation in the nation's capital. Using the little Elecraft KX2 after looking at the display of field spy radios from the 1940's certainly makes one appreciate the advances in technology!

Parks On The Air (POTA) in Washington, D.C.



Parks On The Air (POTA) in Washington, D.C.

